

KIRILLOVA, M.M.; CHARIKOV, B.A.

Optical properties of niobium in the region of the infrared spectrum. Fiz. met. i metalloved. 16 no.2:205-208 Ag '63.
(MIRA 16:8)

1. Institut fiziki metallov AN SSSR.
(Niobium—Optical properties)
(Spectrum, Infrared)

ACCESSION NR: AP4043014

S/0051/64/017/002/0254/0258

AUTHORS: Kirillova, M. M.; Charikov, B. A.

TITLE: Investigation of the optical properties of transition metals

SOURCE: Optika i spektroskopiya, v. 17, no. 2, 1964, 254-258

TOPIC TAGS: refractive index, optical transmission, conductivity, plasma frequency, relaxation frequency

ABSTRACT: The author discusses the results of measurements of the optical properties of Ti, Zr, and Co in the infrared region of the spectrum. The measurements were made in the 2.5--20 micron interval by a polarimetric method (I. R. Beattie, Phi. Mag. v. 46, 235, 1955; Physica v. 23, 898, 1957), using bulk mirrors made from the metals in question either by mechanical or chemical polishing. The purities of the initial metals were 99.9, 99.99, and 99.9% for Ti, Zr, and Co, respectively. The tests were made at room temperature. The

1/4

ACCESSION NR: AP4043014

data are used to evaluate the plasma and relaxation frequencies of the conduction electrons. Some of the microcharacteristics of the conduction electrons are calculated and it is suggested that the electrons from the unfilled d-band contribute to the conductivity. Differences between the static conductivity, calculated from the optical data, and the measured dc conductivity are discussed. "The authors thank A. V. Sokolov and M. M. Noskov for continuous interest and help." Orig. art. has: 3 figures, 5 formulas, and 2 tables.

ASSOCIATION: None

SUBMITTED: 12Aug63

ENCL: 02

SUB CODE: OP, MM

NR REF SOV: 004

OTHER: 003

2/4

ACCESSION NR: AP4043014

ENCLOSURE: 01

Refractive index (n) and absorption coefficient (k) of Ti, Zr, and Co

λ , mμ	Ti		Zr		Co		λ , mμ	Ti		Zr		Co	
	n	k	n	k	n	k		n	k	n	k	n	k
microns													
2.5	4.57	5.30	3.80	6.05	5.10	7.80	8.5	6.96	10.1	—	—	—	—
3.0	4.57	5.83	3.95	6.46	4.88	8.46	9.0	7.30	16.6	7.30	21.0	6.56	27.2
3.5	4.56	6.58	3.45	7.55	—	—	10	7.85	18.5	8.20	23.0	7.10	29.5
4.0	4.66	7.27	3.57	8.71	4.70	11.0	11	8.50	19.9	9.05	25.0	8.10	32.6
4.5	4.66	8.06	3.75	9.80	4.78	12.8	12	9.20	20.5	10.0	26.4	9.0	34.7
5.0	4.87	9.18	3.99	11.5	4.70	14.7	14	10.8	24.3	—	—	10.2	38.0
5.5	5.07	10.3	4.35	12.8	4.76	16.2	15	12.0	25.6	12.4	32.5	11.2	40.5
6.0	5.38	11.3	4.52	14.0	5.00	17.5	16	13.0	27.1	12.8	34.6	—	—
6.5	5.63	12.2	5.00	15.3	5.20	19.3	17	13.7	28.0	13.3	36.0	13.5	45.0
7.0	5.89	13.2	5.50	16.6	5.40	20.9	18	14.9	29.6	—	—	—	—
7.5	6.31	13.9	—	—	—	—	19	16.8	31.1	—	—	14.9	49.0
8.0	6.56	14.8	6.40	18.3	5.80	24.0	20	17.3	33.8	—	—	15.3	51.7

Card 3/4

ACCESSION NR: AP4043014

ENCLOSURE: 02

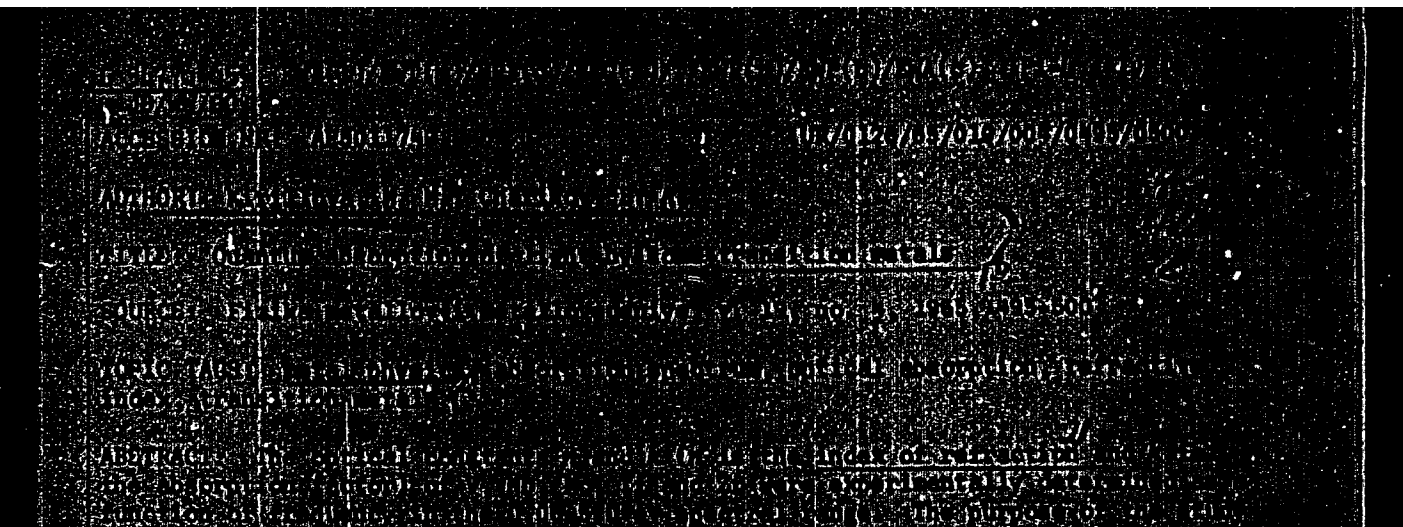
Plasma frequency (Ω), relaxation frequency (γ), and ratio of d- and s-conductivities of Ti, Zr, Nb, and Co

Металл Metal	$\Omega_p^2 \cdot 10^{-14}$ сеч. ⁻¹ 1/sec ²	$\gamma \cdot 10^{-14}$ сеч. ⁻¹ 1/sec	$\frac{\sigma_d}{\sigma_s}$	$\sigma_{opt} \cdot 10^{-14}$ сеч. optical	$\sigma_{st} \cdot 10^{-14}$ сеч. static
Ti	1.02	0.6	0.25	1.75	1.90
Zr	1.92	0.9	0.12	1.90	1.95
Nb	7.25	1.66	0.044	3.65	4.45
Co	2.90	0.4	0.10	6.40	13.2

Card 4/4

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APPROVED FOR RELEASE: 06/13/2000

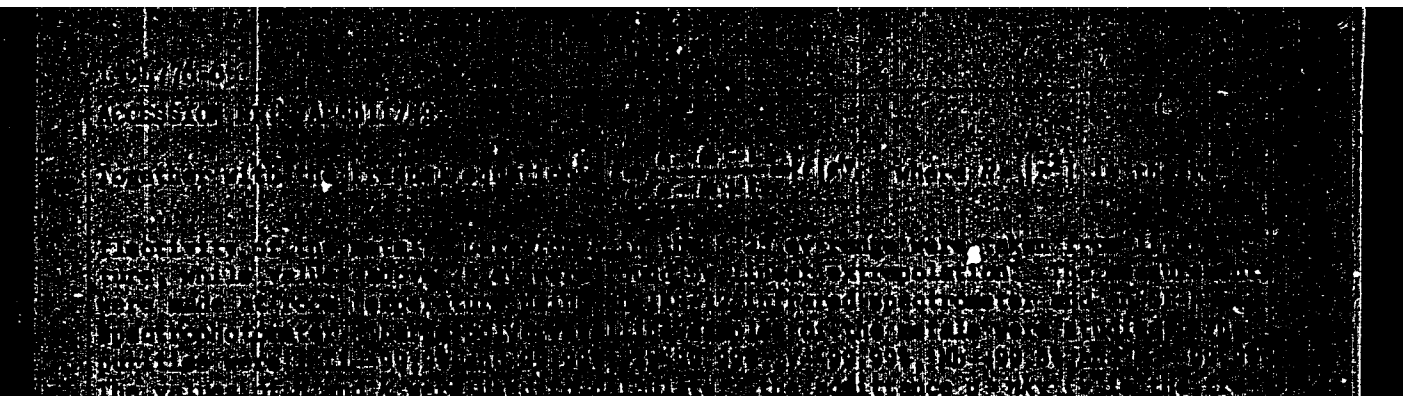
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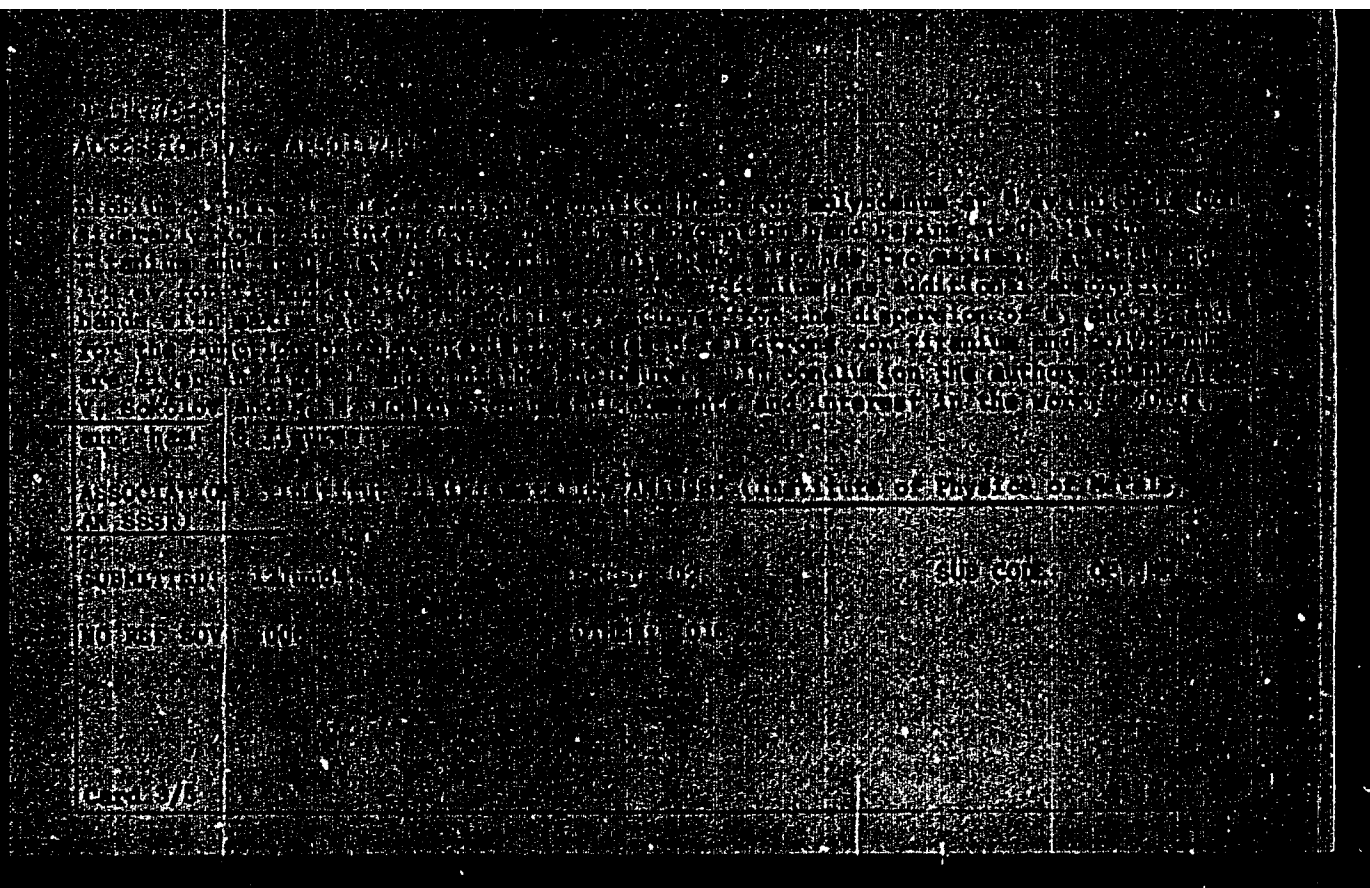


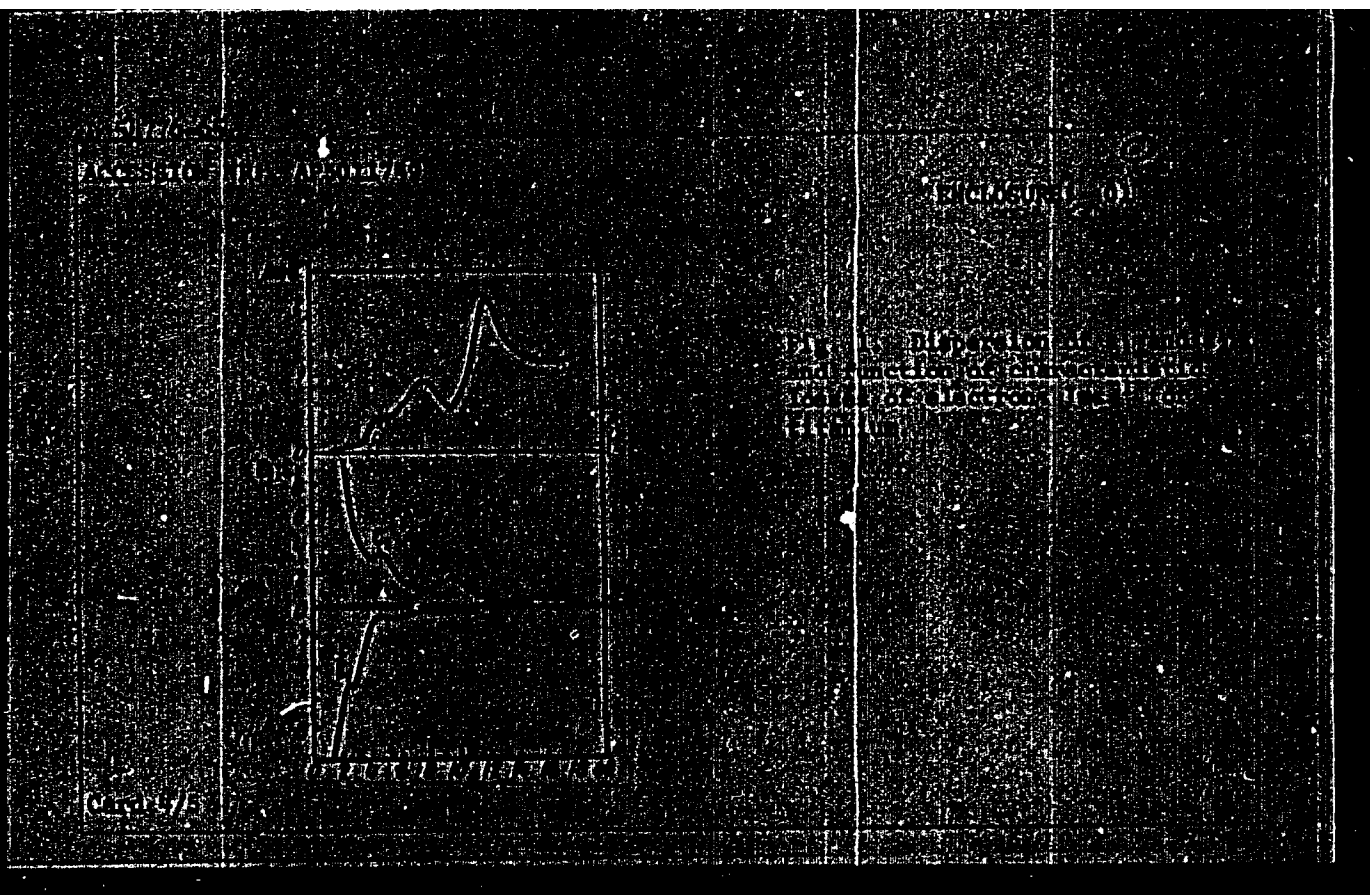
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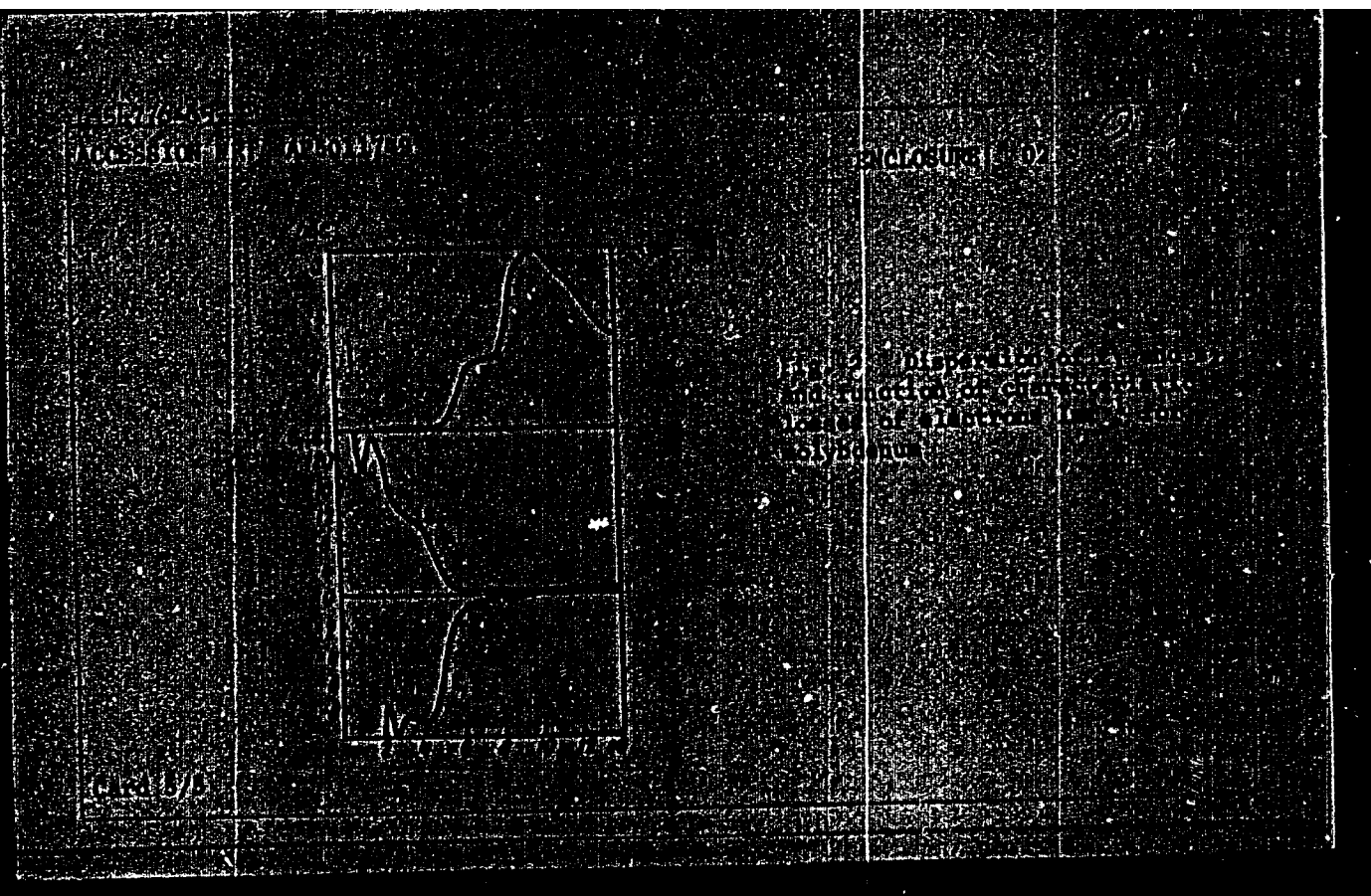
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KIRILLOVA, N.

Application of the polarographic method at the Berezniki aniline dye
plant. Zav.lab. 29 no.2:250 '63. (MIRA 16:5)

1. Nachal'nik analiticheskoy laboratorii Bereznikovskogo
anilino-krasochного zavoda.

(Berezniki—Aniline)(Polarography)

KRASIL'NIKOV, N.A.; KORENYAKO, A.I.; SOKOLOVA, A.I.; NIKITINA, N.I.;
KIRILLOVA, N.F.

Interspecific antagonism as a species characteristic. Mikro-
biologiya 32 no.17-12 '63 (MikA 17:3)

1. Institut mikrobiologii AN SSSR.

ASEYEVA, I.V.; KIRILLOVA, N.F.

Effect of soil bacteria on the concentration of free amino acids
in leguminous plants. Nauch. dokl. vys. shkoly; biol. nauki no.1:
139-144 '60. (MIRA 13:2)

1.Rekomendovana kafedroy biologii pochv Moskovskogo gosudarstvennogo
universiteta im. M.V. Lomonosova.
(Leguminosae) (Amino acids) (Soil micro-organisms)

KORENYAKO, A.I.; KIRILLOVA, N.F.; NIKITINA, N.I.

Paper chromatography in the classification of actinomycetes.
Mikrobiologiya 29 no.6:911-918 N-D '60. (MIRA 14:1)

1. Institut mikrobiologii AN SSSR.
(ACTINOMYCES) (PAPER CHROMATOGRAPHY)

KRASIL'NIKOV, N.A.; KALAKUTSKIY, L.V.; KIRILLOVA, N.F.

Promicromonospora gen. nov., a new genus of ray fungi. Izv. AN
SSSR, Ser. biol. 26 no.1:107-112 Ja-F '61. (MIRA 14:3)

1. Microbiological Institute, Academy of Sciences of the U.S.S.R.,
Moscow.

(ACTINOMYCES)

EL'-REGISTAN, G.I.; KIRILLOVA, N.F.; KRASIL'NIKOV, N.A.

Carotenoid pigments from *Proactinomyces asteroides*. Izv. AN
SSSR Ser. biol. 30 no.1:128-130 Ja-F '65.

(MIRA 18:2)

1. Institut mikrobiologii AN SSSR.

KALAKUTSKIY, L.V.; KIRILLOVA, N.F.

Germination of spores of actinomycetes on "previously used" media.
Mikrobiologiya 34 no.1:163-170 Ja-F '65.

(MIRA 18:7)

1. Institut mikrobiologii AN SSSR.

KIRILLOVA, N.I.

POPOV, I.S.; KIRILLOVA, N.I.; SHUR, S.G.; SCHUCHMAN, V.M.

Role of yeast-like fungi in eczema. Vest. vener. No.3:29-30 May-
June 50. (CML 19:4)

1. Of the Skin-Venereological Clinic (Director — Prof. I.S.Popov),
Second Khar'kov Medical Institute (Director- Docent P.L.Shchupik).

KOVALEVA, N.I.; KIRILLOVA, N.I.; MIRONOVA, M.V.

Immunogenic, toxic, and antigenic properties of antigens obtained from enteric bacteria cultured on synthetic media under aerobic conditions. Zhur.mikrobiol.epid. i immun. 27 no.10:18-22 0 '56.

(MIRA 9:11)

1. Iz Instituta epidemiologii i mikrobiologii imeni N.F.Gamalei
AMN SSSR

(BACTERIA,

Enterobacteriaceae, antigens from strains cultured on synthetic media & exposed to aeration (Rus))

(ANTIGENS,

Enterobacteriaceae, from strains cultured on synthetic media & exposed to aeration (Rus))

KAPUSTIN, Ye.I., kand.ekon.nauk; LAVROV, V.V.; RYUMIN, S.M.; KONSTANTINOV, Yu.A.; PRAVDIN, D.T., kand.ekon.nauk; ~~KRILLOVA~~, N.I.; RIMASHEVSKAYA, N.M.; ANTROPOV, B.F.; RYABKOV, F.S.; POPOV, G.A.; DEM'YANOVA, V.A.; SMOLYAR, I.M.; ACHARKAN, V.A., kand. yurid.nauk; BRONER, D.L.; SHEPTUN, Ye.V.; KRYAZHEV, V.G.; ALESHINA, F.Yu., kand. ekon. nauk; KUZNETSOVA, N.P.; MARKOVICH, M.B.; BIBIK, L.F.; BUDARINA, V., red.; GRIGOR'YEVA, I., mladshiy red.; CHEPELEVA, O., tekhn. red.

[Public consumption funds and improving the welfare of the people in the U.S.S.R.] Obshchestvennye fondy i rost blagosostoiانيا naroda v SSSR. Moskva, Sotsekgiz, 1962. 222 p. (MIRA 15:6)
(Cost and standard of living)

KIRILLOVA, N.M.

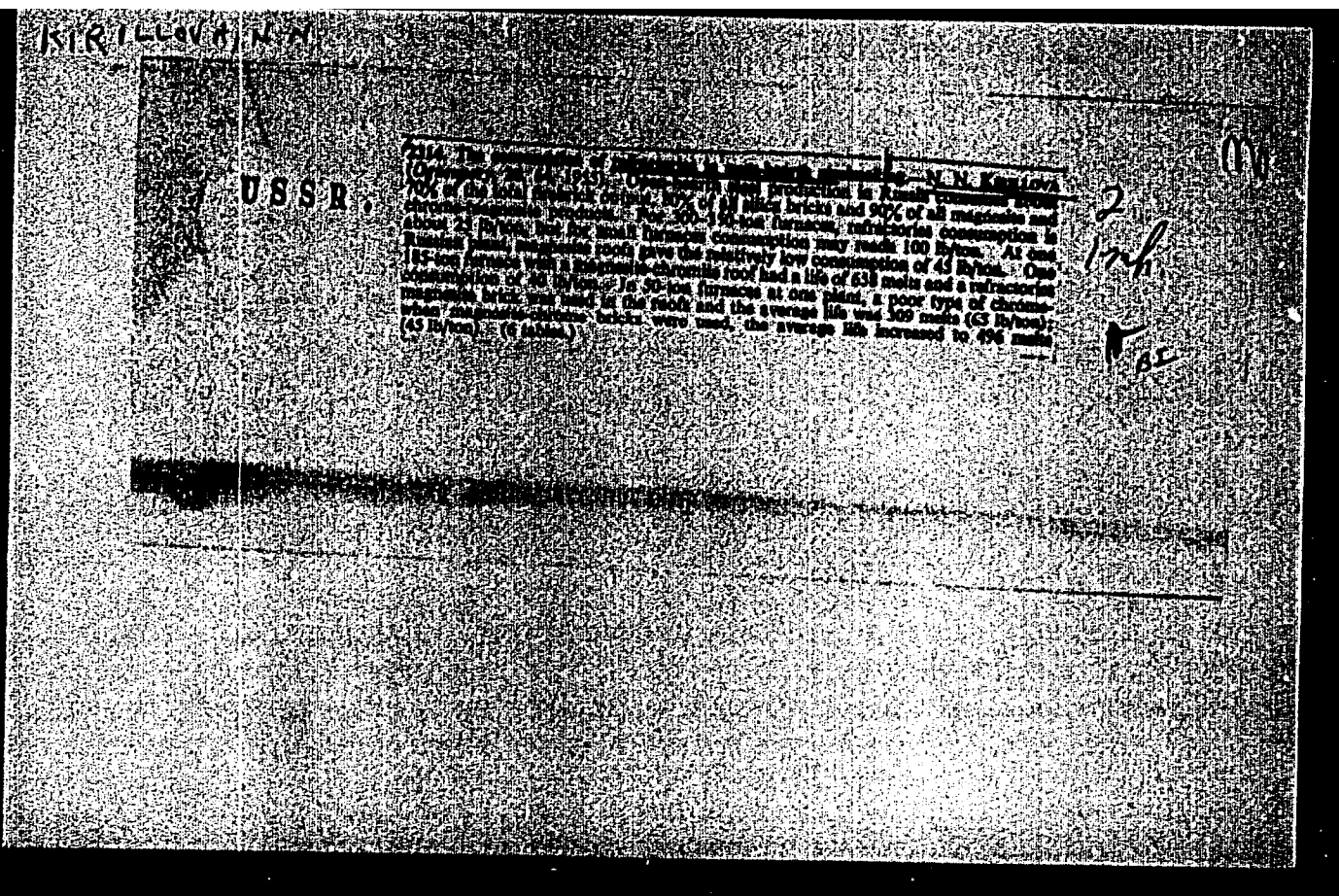
GULYAKIN, I.V., doktor biol. nauk prof.; KIRILLOVA, N.M., mladshiy nauchnyy
sotrudnik; KOROVKINA, A.V., kand. sel'skokhozyaystvennykh nauk;
YUDINTSEVA, Ye.V., kand. biol. nauk.

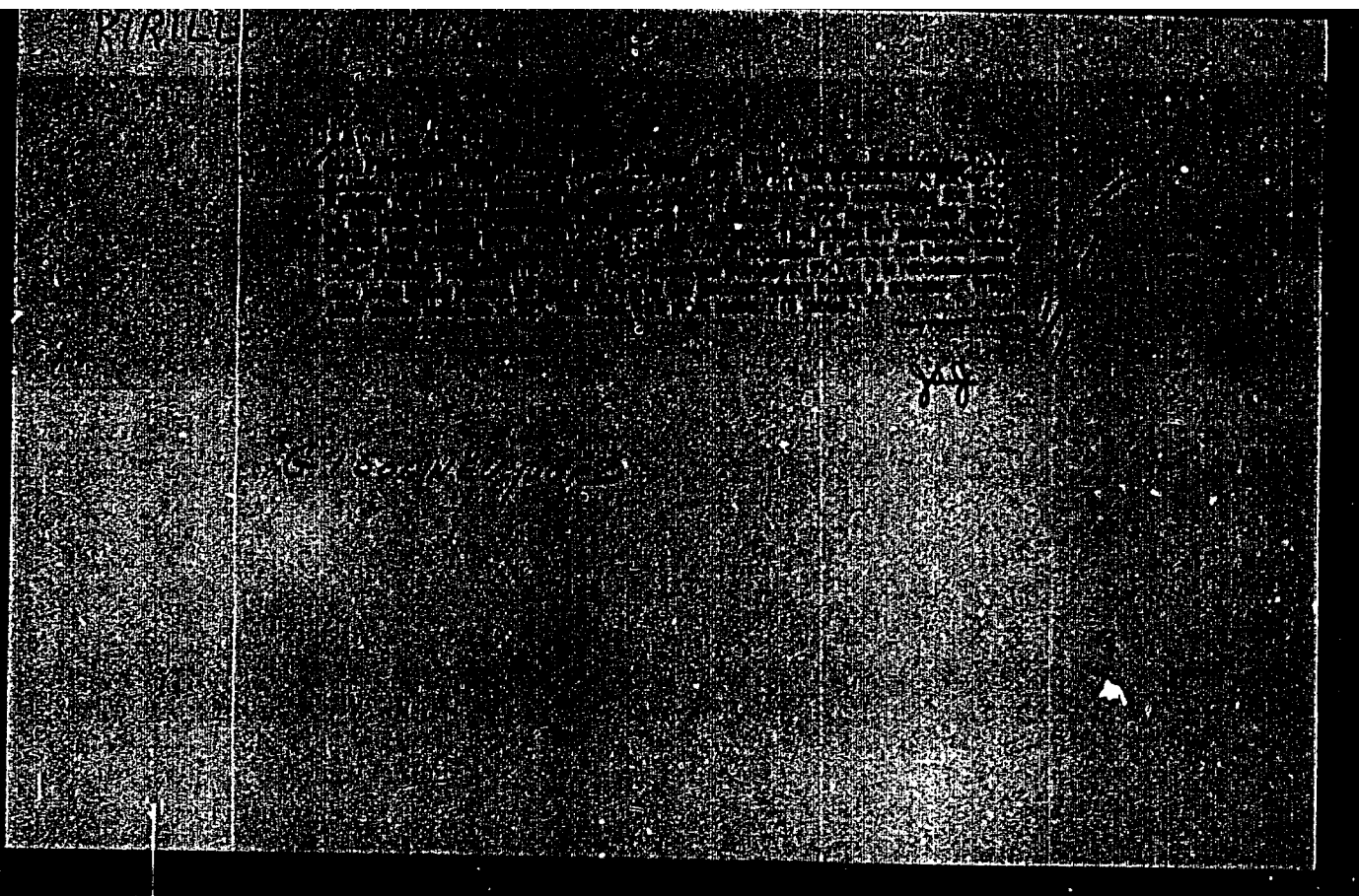
Effect of radiothorium on the growth and yield of wheat [with
summary in English]. Izv. TSKhA no.6:7-18 '57. (MIRA 11:3)
(Wheat) (Plants, Effect of radiothorium on)

KAMILOVA, R., kand.biolog.nauk; KIRILLOVA, N.M.

Herbicides from wastes. Priroda 53 no.3:80-81 '64. (MIRA 17:4)

1. Institut genetiki i fiziologii rasteniy AN UzSSR, Tashkent.





AUTHORS: Nazarov, M. P., Kirillova, N. N., Radina, Yu. V. SOV/131-58-10-4/11

TITLE: Technology and Quality of Magnesite-Chromite Arch Bricks
(Sostoyaniye tekhnologii i kachestvo magnezitokhromitovogo
svodovogo kirpicha)

PERIODICAL: Ogneupory, 1958, ¹²Nr 10, pp. 454-461 (USSR)

ABSTRACT: At the beginning of 1958, "Gisornenor" made a survey of the
Zaporozh'ye, Chasov Yar, Panteleymonovka, "Magnezit" plants
of the Kuznetskiy metallurgicheskiy kombinat (Kuznetsk
Metallurgical Plant). In all of these plants magnesite-
chromite bricks are produced following approximately the same
process. The chemical composition of the raw material is given
in table 1 and the composition of the layers in table 2. The
grain sizes of the initial materials in the respective plants
are shown in tables 3 and 3a and the specific gravity of the
bricks in table 4. Table 5 contains information on the burning
of magnesite-chromite bricks in tunnel kilns and table 6 in
gas-chamber kilns. The characteristic properties of these
bricks for the year 1957 may be seen in table 8. The proper-

Card 1/2

Technology and Quality of Magnesite-Chromite
Arch Bricks

SOV/131-58-10-4/11

ties of arch bricks have to be improved and their output
must be increased.
There are 8 tables.

ASSOCIATION: Gisogneupor

Card 2/2

15(6)

AUTHORS:

Kirillova, N. N., Nazarov, M. P., Radina, Yu. V. SOV/131-58-11-5/9

TITLE:

The Performance of Refractory **Materials** Open-Hearth Furnaces
(Sluzhba ogneporov v martenovskikh pechakh)

PERIODICAL:

Ogneupory, 1958, Nr 11, pp 509-516 (USSR)

ABSTRACT:

Magnesite-chromite vault bricks are produced in the following plants: "Magnezit", Zaporozhskiy, Chasov-Yarskiy imeni Ordzhonikidze, Panteleymonovskiy imeni K. Marks, as well as in the Department for Refractory **Materials** of the Kuznetskiy Metallurgic Kombinat (KMK). A description of the bricks is given in table 1. The magnesite-chromite vaults were constructed according to a design by Frenkel' (UNIIIO). The highest degree of stability with the use of oxygen was obtained in the furnaces of the "Zaporozhstal" Plant and of the Nizhne-Tagil'skiy Metallurgic Kombinat (Table 2). Table 3 shows the performance of open-hearth furnaces of equal capacity with magnesite-chromite vaults. In another table data concerning equal furnaces of the NTMK are listed. In recent years unburned magnesite-chromite bricks were used for open-hearth furnaces of low capacity (Table 4). A description of port bricks is given in table 5.

Card 1/3

ASSOCIATION: GISOGNEUPOR

The Performance of Refractor **Materials** in Open-Hearth Furnaces

SOV/131-58-11-5/9

Table 6 shows the stability of the upper rows of the ports of air regenerators. The performances of ports and open-hearth furnaces in the MMK are described in table 7. Another table gives the consumption of refractory material per ton of steel. Conclusions: for furnaces operating intensively, as well as those in which metal alloys are melted, the vaults should be built of bricks containing periclase-spinellide or of high density magnesite-chromite bricks burnt at high temperature, respectively, according to the method of the UNIIO; magnesite-chromite brickwork is suitable for the lining surface of the slag-pocket vaults and the dinas walls of the slag pockets; for the brickwork of the upper furnace ports, where there are oxygen and very high temperatures, forsterite bricks are recommended; in other furnaces it is advisable to use highly aluminiferous and dinas-chromite bricks; the quality of the magnesite-chromite vault bricks must be improved; the density of the forsterite port bricks must be increased. There are 9 tables.

Card 2/3

KIRILLOVA, N.N.

~~Dyeing of tricot cloth with vatsol and indigosol dyes. Tekst.~~
prom. 22 no.8:60-61 Ag '62. (MIRA 15:8)

1. Nachal'nik khimicheskoy laboratorii Vitebskoy chulochno-trikotazhnoy fabriki imeni Kommunisticheskogo internatsionala molodezhi.
(Dyes and dyeing--Rayon)

MELENIKOV, B.N.; KIRILLOVA, M.N.; MORYGANOV, F.V.

Microphotometric method for studying the diffusion of dyes
in a cellophane film. Izv. vys. ucheb. zav.; tekhn. tekst. prom.
no.6:118-123 '63 (MIRA 17:8)

1. Ivanovskiy khimiko-tekhnologicheskii institut.

KUTATELADZE, S.S.; LEONT'YEV, A.I.; RUBTSOV, N.A.; GOL'DSHTIK, M.A.; VOLCHKOV, E.P.; DAVYDOVA, N.V.; DRUZHININ, S.A.; KIRILLOVA, N.N.; MALENKOV, I.G.; MOSKVICHEVA, V.N.; MIRONOV, B.P.; MUKHIN, V.A.; MUKHINA, N.V.; REBROV, A.K.; FEDOROV, V.K.; KHABAKHPASHEVA, Ye.M.; SHTOKOLOV, L.S.; SHPAKOVSKAYA, L.I., red.

[Heat and mass transfer and friction in a turbulent boundary layer] Teplomassoobmen i trenie v turbulentnom pogranichnom sloe. Novosibirsk, Red.-izd. otdel Sibirskogo otd-nia AN SSSR, 1964. 206 p. (MIRA 18:1)

KIRILLOVA N. Ye.
KIRILLOV, N.I.; KIRILLOVA, N.Ye.

The possibility of increasing the light sensitivity of a color negative film by changing its processing. Zhur. nauch. i prikl. fot. i kin. 3 no.1:39-41 Ja-F '58. (MIRA 11:2)

1. Vsesoyuznyy nauchno-issledovatel'skiy kino-fotoinstitut.
(Color photography)

KIRILLOVA, N. YE.

PHASE 1 BOOK NOTIFICATION 607/2159

Александровская Анна Степановна. Ездил на лыжах по зимней тропе в 1951 г. в Ленинградскую область.

[illegible][illegible]

PHYSICS: The collection of articles is addressed to those working in theoretical and applied photography and cinematography, and to researchers in the electricity and physics of photographic processes.

CONTENTS: The collection contains articles from the editorial files of the Journal concerning photobiology and photochemistry. The subjects are arranged chronologically according to the date of publication. The subjects include: the nature and properties and processing of haloid silver light-sensitive layers; the nature of photographic emulsions; the permeability of photographic layers; optical theory and technology of the preparation of photographic films; physical and chemical changes occurring in photographic materials during exposure; the processing of black-and-white and color photographic materials. Many of the articles contain the results of scientific investigations made by the authors. The collection also includes several reviews of current problems in the theory of chemical-photo-graphic processes. A bibliography of Soviet and non-Soviet references accompanies each article.

II. OFFICIAL REGISTRATION AND MONITORING

Series A-4 - Investigation of Concentration Effect During Optical Neutralization of Photographic Emulsions

Investigation of Interactions of Microplasma With
Silver Ions in Solution

Solomon, S. H. Epimerization of Intrahepatic Lipids
Solomon, and R. H. Pritchard. Methods of Increasing the Stability of Epimerized Adrenomedullary Lipids

THE NATIONAL ASSOCIATION OF REAL ESTATE BROKERS

Subj. Pt. I (General). Investigation of Local Effects in Development and Their Effect on the Quality of Working Practice

Kirillov, N. I., A. N. T. Kucharskaya, and B. Ye. Yevlinskaya. Effect of the Stability of Commercial Marketing Actions Used in Foreign Processes.

1. WILLIAM H. HARRIS, A. S. TYPESETTER, and H. T. KIRKLAND,
CRILLINGTON OF VARIOUS PRINTING SOLUTIONS IN KODAK PROCESS

Karl L. R. A.M., York County, and J. H. Williams.
Investigation of Form of Life History of a Cold-
Blooded Fish Found in Lake Erie.

Annali di Mat. Problem of the Embeddability of Multilayer Color Regions

W. G. Thompson, D.D., and S. A. Elwyn. Problem of Storage of
Development

AVAILABLE: Library of Congress

Case 7/7

JA/200/ma-15
10-24-63

KIRILLOV, N.I.; YERMOLAYEVA, N.I.; KRUPENIN, L.K.; KIRILLOVA, N.Ye.

Investigating the hardening of positive color film during its processing. Zhur.nauch.i prikl. fot. i kin. 6 no.2:81-86 Mr-Ap '61. (MIRA 14'4)

1. Vsesoyuznyy nauchno-issledovatel'skiy kinefotoinstitut.
(Color photography--Films)

KRESHKOV, A.P.; BYKOVA, L.N.; KIRILLOVA, O.F.

High-frequency titration of aliphatic dicarboxylic acids in
nonaqueous solutions. Izv.vys.ucheb.zav.; khim.i khim.tekh.
7 no.6:914-918 '64. (MIRA 18:5)

1. Moskovskiy khimiko-tehnologicheskoy institut imeni Mendeleyeva,
kafedra analiticheskoy khimii.

KRESHKOV, A.P.; BYKOVA, L.M.; KIRILLOVA, O.F.

High-frequency titration of dicarboxylic acids in a dimethyl-
formamide medium. Zhur. anal. khim. 20 no.8:846-848 '65.
(UFA 18:10)

L. Moskovskiy khimiko-tekhnologicheskiy institut im. D.I.
Mendeleeva.

VLASOV, O.N.; GIVANZHAN, V.A.; KIRILLOVA, O.G.

Association of acid esters of dicarboxylic acids. Izv. Ak.
khim. 35 no.1:3-7 Jan '65. (RUSS 18:2)

1. Leningradskiy Filial Gosudarstvennogo Instituta azotnyy
promyshlennosti.

KIRILLOVA, O. M.

KIRILLOVA, O. M. "Investigation of the Cutting Properties of Tools made of Mineral Ceramics." Min Heavy Machine Building USSR. Central Sci Res Inst of Technology and Machine Building (TSNIITMash). Moscow, 1956. (Dissertation for the Degree of Candidate in Technical Sciences)

So: Knizhaya Letopis', No. 17, 1956

69516

SOV/123-59-21-87666

Translation from: Referativnyy zhurnal. Mashinostroyeniye, 1959, Nr 21, p 78 (USSR)

18.5200

AUTHORS: Isayev, A.I., Kirillova, O.M.

TITLE: Investigation of the Cutting Properties of Mineral-Ceramic Tools¹⁴₁₅

PERIODICAL: V sb.: Reziyie mineralokeram. instrumentami, Moscow, Oborongiz, 1958, pp 20 - 36

ABSTRACT: Results are given of the investigations of cutting and physical-mechanical properties of mineral-ceramic plates (MP), their structure and the state of machine part surface layers, machined with MP tools. The investigations were carried out during the discontinuous turning of the steel grades 40Kh and 45Kh under the following cutting conditions: $v = 190$ m/min, $s = 0.3$ mm/revolution, and $t = 1 \div 2$ mm. The strength of the cutting blade was rated by the number of its being put into operation and taken off during the working process. The best results concerning the strength of the cutting blade were obtained at the following geometry: width of chamfer $f = 0.2$ mm, front angle on chamfer γ_{av} from -20° to -25° , $\gamma = 5^\circ \div 10^\circ$, $\alpha = 3^\circ \div \lambda = 0^\circ$, and $\varphi = 45^\circ$. It was found that a variation of σ_b bend within the limits of $22 - 44$ kg/mm² and of the specific gravity

Card 1/2

69516

SOV/123-59-21-87666

Investigation of the Cutting Properties of Mineral-Ceramic Tools

within a range of 3.8 - 3.92 does not show any considerable effect on the resistance to wear of MP during a continuous turning process, but with a discontinuous turning operation they essentially affect the resistance to wear and strength of the tools. A diagram is given of the effect of the grain size in the MP structure on the tool durability during continuous and discontinuous turning operations. A connection is established between the tool durability, the presence of aluminum oxide grains in the MP structure, and defects caused by technological factors. It was found that the quality of the machined surface did not show any considerable changes when the cutting rate was varied. Investigation results are given of the effect of the cutting rate, feed and magnitude of tool wear on the magnitude of residual stresses in the surface layer when turning with MP tools. An analysis of the specimens as to their corrosion resistance showed a higher corrosion resistance of those specimens which were machined with the TsM-332 grade compared with the T15K6 grade. 24 figures.

B.I.L.

Card 2/2

KIRILLOVA, O.M.

PLATE 1 BOOK CITATIONS XV/100

Monograph "Vysokomol'kul'nyy i fizicheskoye sostoyaniye i mekhanizmy razvitiya" (High-molecular and physical state and mechanisms of development of polymers) by O.M. Kirillova, Moscow, 1960, 175 p. (Series: "Vysokomol'kul'nyy i fizicheskoye sostoyaniye i mekhanizmy razvitiya" No. 99)

Monograph "Vysokomol'kul'nyy i fizicheskoye sostoyaniye i mekhanizmy razvitiya" (High-molecular and physical state and mechanisms of development of polymers) by O.M. Kirillova, Moscow, 1960, 175 p. (Series: "Vysokomol'kul'nyy i fizicheskoye sostoyaniye i mekhanizmy razvitiya" No. 99)

Monograph "Vysokomol'kul'nyy i fizicheskoye sostoyaniye i mekhanizmy razvitiya" (High-molecular and physical state and mechanisms of development of polymers) by O.M. Kirillova, Moscow, 1960, 175 p. (Series: "Vysokomol'kul'nyy i fizicheskoye sostoyaniye i mekhanizmy razvitiya" No. 99)

Monograph "Vysokomol'kul'nyy i fizicheskoye sostoyaniye i mekhanizmy razvitiya" (High-molecular and physical state and mechanisms of development of polymers) by O.M. Kirillova, Moscow, 1960, 175 p. (Series: "Vysokomol'kul'nyy i fizicheskoye sostoyaniye i mekhanizmy razvitiya" No. 99)

Card 1/2

CONTENTS. The book contains a summary of work conducted by the personnel of the Institute in the field of mechanical and quality control of parts, materials and assemblies in the various branches of the machine tool industry. Also considered are the application of scientific methods in the design and construction of machine tools, the application of scientific devices for the detection and measurement of mechanical properties of materials. The personnel are mentioned. References follow some of the chapters.

TABLE OF CONTENTS

PART I. WORKING OF METALS IN CUTTING

- Ch. I. Some aspects of (mechanical) work in the field of mechanics of the metal-cutting process [Sov. S.S., Doctor of Technical Sciences] 7
- Ch. II. Development of efficient cutting systems, and methods of improving the performance of operation of machine tools in heavy-duty plants [Sov. S.S., S.I. Vasil'yev and L.I. Kuznetsov, Candidates of Technical Sciences; I.D. Verbitskiy and O.G. Gerasimov, Engineers] 31
- Card 2/2
- Ch. III. The development and design of new tool materials [Sov. S.S. and L.I. Kuznetsov, Doctor of Technical Sciences; L.I. Kuznetsov and G.M. Kuznetsov, Candidates of Technical Sciences; V.I. Kuznetsov, Engineer] 39
- Ch. IV. The design of cutting tools for the heavy-duty industry [Lopatin, S.I., Candidate of Technical Sciences; I.D. Verbitskiy, S.I. Verbitskiy, A.I. Chernyi, Engineers] 70
- Ch. V. Some trends and some aspects of investigations of the mechanical properties of metals [Sov. S.S., S.I. Vasil'yev, S.I. Vasil'yev, Engineers] 88
- Ch. VI. Some aspects of work on the improvement of manufacturing processes in the heavy-duty industry [Sov. S.S., S.I. Vasil'yev, Engineer; O.G. Gerasimov, I.I. Kuznetsov, S.I. Kuznetsov, Candidates of Technical Sciences] 111

PART II. QUALITY CONTROL OF PARTS

- Ch. I. Magnetic flaw detection in striving for quality of metal [Sov. S.S., S.I. Vasil'yev, Candidate of Technical Sciences] 137
- Card 3/2

- Ch. II. Magnetic flaw detection and measurement of metal [Sov. S.S., S.I. Vasil'yev, Candidate of Technical Sciences] 154
- AVAILABLE: Library of Congress

ACC NR: AM6003479

Monograph

UR/

Kirillov, K. N.; (Candidate of Technical Sciences); Kirillova, O. M.
(Candidate of Technical Sciences)

Drilling holes in parts made of materials of low workability
(Sverleniye otverstiy v delayakh iz trudnoobrabatyvayemykh materialov)
Moscow, Izd-vo "Mashinostroyeniye", 1965. 87 p. illus., biblio.
4000 copies printed.

TOPIC TAGS: heat resistant steel, machine tool, material deformation

PURPOSE AND COVERAGE: This booklet is intended for engineer-technologists at machine works. The booklet reviews the problems connected with drilling machine parts from stainless, hardened, and heat-resistant steels and alloys. The construction and geometry of drills, the processes of metal deformation by drilling and chip forming and the methods for cooling and lubricating the cutting zone and drilling equipment are discussed.

TABLE OF CONTENTS

Introduction -- 3

Card 1/2

UDC 621.95

ACC NR: AM6003479

General information on drilling machine parts from hard materials - 5
Metal deformation and process of chip forming in drilling -- 7
Cutting forces and temperature in the cutting zone during drilling of
hard materials. Drills for drilling parts from hard materials - 24
Geometrical parameters of drill cutting parts -- 52
The materials for tools and selection of cooling and lubricating
liquids -- 56
Cutting conditions for drilling stainless and heat-resistant
materials -- 61
The effect of the technological conditions of drilling on the relia-
bility of drills for drilling heat-resistant materials -- 66
Equipment -- 71
References -- 87

SUB CODE: 11,13/ SUBM DATE: 09Jul65/--65/ ORIG REF: 012/ SOV REF: 001

Cord 2/2

ISAYEV, Aleksey Il'ich, doktor tekhn. nauk, prof.; KIRILLOVA, Ol'ga
Mikhaylovna, inzh.; REMEZOV, N.S., inzh., ved. red.;
RUKAVISHNIKOV, V.I., inzh., red.; SMIRNOV, B.M., tekhn.red.

[Investigating the cutting properties of cutting tools with
TSM-332 ceramic metal tips] Issledovanie rezhushchikh svoistv
reztsov s mineralokeramicheskimi plastinkami TsM-332. Moskva,
Filial Vses.in-ta nauchn. i tekhn.informatsii, 1957. 17 p.
(Peredovoi nauchno-tekhnicheskii i proizvodstvennyi opyt. Tema 11
No.M-57-68/3) (MIRA 16:3)
(Metal-cutting tools--Testing)

KIRILLOVA, O.S.

Sowing forage lupine. Zemledelie 25 no.12:41 D '63.
(MIRA 17:4)

KIRILLOVA, O.S.

Planting time for rye. Zemledelie 27 no.8:56-57 Ag '65.
(MIRA 18:11)

1. Brestskaya oblastnaya sel'skokhozyaystvennaya opytnaya
stantsiya.

KIRILLOVA, S. A.

KIRILLOVA, S. A. -- "School Geography and Its Role in Polytechnic Teaching in Lectures on the Geography of the USSR (Based on Material from the KASSR)." Moscow, 1956. (Dissertation for the Degree of Candidate in Pedagogical Sciences).

So.: Knizhnaya Litopis', No. 7, 1956.

CC KIRILLOVA, S.

A-3

Action of magnesium on dibromotoluene and dibromo-m-xylene. J. S. RALKIND, N. KIRILLOVA, and N. NIKIFOROVA (J. Gen. Chem. Russ., 1931, 4, 193-198).—Mg and 3:4-dibromotoluene interact slowly and with difficulty; both Br atoms react, mainly forming org. Mg compounds and some tarry products. Tribromotoluene does not react. 4-Bromo-m-xylene gives dimethylbenzoic acid. 4:6-Dibromo-m-xylene reacts when the Mg is activated by I, forming 4-bromo-m-xylene and a Mg org. compound which gives 6-bromo-3:4-dimethylbenzoic acid on decomp. with H₂O. The presence of the second Me group in the C₆H₃ ring hinders the reaction, allowing only one Br atom to react. R. B. UVAROV.

ASH-55A METALLURGICAL LITERATURE CLASSIFICATION

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1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0	1	2	3	4	5	6	7	8	9	0

KIRILLOVA, S. L.

13

Investigation of the properties and conditions for producing Novolac masses. A. D. Sukhoy, S. L. Kirillova and A. V. Kupier. *Plasticheskie Massy, Khim. Soderzh.* 1939, 191-201. *Chem. Refers.* 1940, No. 3, 107. HCHO and PhOH in the ratios 21:100, 26:100 and 28:100 were condensed, with 0.3% HCl (to 1.1%) of the wt. of PhOH as catalyst. The products were dried in a Cu kettle with a mixer and in a flask with a mixer, on an oil bath heated to 170-200°. Water was removed at 160-180°, and the temp. of the resin then increased gradually to the temp. of the bath. The "final dropping temp." increases with increase of HCHO content. By standard drying, a standard product can be obtained without analyzing samples of the resin, but only by controlling the temp. during the drying process. Open drying reduces the amt. of free phenol to 0.2%. By drying in the flask the yield of the resin can be brought to 100%. For low-mol. resins (with ratios 21:100 and 26:100) there is a direct linear relation between the η of the 50% alc. soln. and the dropping temp. of the resin. Increasing the amt. of HCHO increases sharply the η of the resin soln. Decrease of the percentage of free phenol during open drying is directly proportional to the increase of the dropping temp. At equal dropping temps. a larger content of phenol is found in resins prepd. with large amts. of HCHO. The dropping temp. increases during the drying in the flask, but the content of free phenol remains unchanged. For detg. the softening temp. of resin, optimum results in speed, convenience and accuracy are obtained by a modified Ubbelohde method.

W. R. Henn

ASAC SLA METALLURGICAL LITERATURE CLASSIFICATION

10000 11000 12000 13000 14000 15000 16000 17000 18000 19000 20000 21000 22000 23000 24000 25000 26000 27000 28000 29000 30000 31000 32000 33000 34000 35000 36000 37000 38000 39000 40000 41000 42000 43000 44000 45000 46000 47000 48000 49000 50000 51000 52000 53000 54000 55000 56000 57000 58000 59000 60000 61000 62000 63000 64000 65000 66000 67000 68000 69000 70000 71000 72000 73000 74000 75000 76000 77000 78000 79000 80000 81000 82000 83000 84000 85000 86000 87000 88000 89000 90000 91000 92000 93000 94000 95000 96000 97000 98000 99000

CA KIRILLOVA, S. I.

10

Synthesis of vinyl ethers of polyvinyl alcohol S. N. Shakov and S. I. Kirillova *Zhne. Priklad. Khim.* (1) Applied Chem. 22, 1099 (1959) Oxidation of polyvinyl alcohol is best done in aq. alk. soln. at 12-18 atm of CO_2 at 100-135°. At 128-30° the main reaction is more dehydration of the alk. After 10-20 hrs. reaction there are formed products, sol. in H_2O , MeOH , and 80% EtOH , which contain 4.5-6.0 mol-% vinyl groups. The yields range from 50 to 50%. The products are yellowish to brown solids; lighter products are secured by using 8% KOH with addn. of NH_4OH and ZnO . FeS or quinoline gave poor results leading to insol. products. The detn. of the vinyl groups was done by detn. of AcH following hydrolysis with dil. H_2SO_4 . G. M. Koshlapov

KOROTKEVA, I.Yu.; NEYMAN, L.A.; SYRYIN, G.A.; KIRILLOVA, G.

Dipole moments of certain nitroar. Dokl. AN SSSR, 1964, No. 14, 412-414. Vy '64.

1. Moskovskiy institut tonkoy khimicheskoy tekhnologii imeni Lomonosova i Institut biologicheskoy i meditsinskoy khimii AN SSSR. 2. Oten-korrespondent AN SSSR (for Syryin).

YERMOLAYEV, K.M.; KIRILLOVA, S.I.; MAYMIND, V.I.

Synthesis of 2-C¹⁴-acetaminomalonic ester and 2-C¹⁴-hydroxyproline.
Vop. med. khim. 7 no.6:628-631 N-D '61. (MIRA 15:3)

1. Institute of Biological and Medical Chemistry, Academy of
Medical Sciences of the U.S.S.R.

(MALONIC ACID)

(PROLINE)

KIRILLOVA, S. V.

Lab. Catalysts and Gaseous Electro-chemistry, Lomonosova Moscow State Univ., (-1946-)

Chair of Chemistry, Second Moscow Med. Inst., (-1946-)

"The Excited Form of Cathode Hydrogen."

Zhur. Fiz. Khim., No. 7, 1946

Aq. suspensions of WO_3 are not reduced by mod. H_2 and are only slowly reduced by cathodic H. When 20 cc. of H_2 is cathodically liberated in 10 min., 1.6 cc. is used up for reduction. WO_3 suspensions contg. Pt are slowly reduced by H_2 ; a suspension contg. 0.08% of Pt bound 0.8 cc. of H_2 . Cathodic H reduces them more rapidly; the suspension contg. 0.08% of Pt took up 9 cc. The rate of reduction depends little on the material of the cathode (platinized Pt, bright Pt, or Pb), ~~material of the~~ ~~surface~~ decreases in time, and is greater the greater the concn. of Pt in the WO_3 . Pd in the WO_3 is as active as Pt. Cinnamic acid in a suspension of $BaSO_4$ in $H_2O + EtOH + H_2SO_4$ absorbs cathodic H (at a Pb cathode) slowly, but the absorption is much accelerated by adding .06% of Pd to the $BaSO_4$. It is concluded that H^+ ions pass through 2 stages before they reach the state of normal H_2 mols. These stages are H atoms and excited H_2 mols. Since elec. current deposits H also on those parts of the cathode surface that possess only weak adsorptive forces the av. energy of adsorption of cathodic H is smaller than that of "naturally" adsorbed H. The difference between the 2 energies is greater the greater the overvoltage γ . Therefore, from the cathodes with a great γ even H atoms can be desorbed, and those with a medium γ lose H as excited mols. Atoms of H reduce WO_3 , excited mols. reduce $WO_3 + Pt$, and ordinary mols. do not reduce WO_3 at all.

CA

KIRILLOVA, S.V.

Pressure dependence of the rate of dehydration of ethyl alcohol. A. Kh. Bork and S. V. Kirillova (Moscow Building Inst., Moscow). *Zhur. Fiz. Khim.* 29, 224-30 (1955).—In order to confirm a kinetic equation first proposed in connection with EtOH dehydration on Cu (C.A. 29, 6378) and further used for EtOH dehydration on Al_2O_3 (*Zhur. Fiz. Khim.* 12, 237, 238(1938); C.A. 43, 2408c), it is verified that the rate of dehydration of EtOH on Al_2O_3 does not depend on the pressure P (mm.), in agreement with the kinetic equation just mentioned. The Al_2O_3 catalyst is similar to the one used before (activation energy $E = 20,820$ cal./mole). A flow system is used and the vol. of C_2H_4 produced is measured. Low conversions are obtained (3 to 6%). The temp. is 356° . The rate (N.T.P. cc. C_2H_4 /3 min.) remains const. for $31.7 < P < 768.4$. Typical data (on 0.11 g. Al_2O_3 , delivery of 99.96 wt. % EtOH from a microburet 0.56 ml., 4 times per min.) are, resp.: $P = 762.2, 186.2, 86.2, 782.2$; rate = 7.59, 6.24, 6.85, 7.00. A circulating pump (Patrikeev, *Zavodskaya Lab.* 13, 1906(1947)), making it possible to work at low pressures and to measure the vol. of product at atm. pressure, is used in the larger part of the exps. Michel Boudart

Chemistry

KUDRIN, L.N.; BURYNDINA, L.V.; KIRILLOVA, T.A.

New data on the age of layers from Candorbulina universa. Dokl.
AN SSSR 159 no.2:333-335 N '64. (MIRA 17:12)

1. Predstavleno akademikom A.L. Yanshinyam.

RODENKOVA, Ye.G.; RUMYANTSEVA, N.V.; sortirovshchitsa pismennoy korrespondentsii; KITAYEVA, A.V., pochtal'on; KLIMOVA, L.V.; sortirovshchitsa pismennoy korrespondentsii; ZHALILOVA, M., brigadir pochtal'onov; KIRILLOVA, T.I.; KHARINA, T.I., brigadir pochtal'onov; TUZOVA, G.A., sortirovshchitsa.

Leading postal workers are sharing their experiences. Vest. aviazi
20 no.11:22-24 N '60. (MIRA 13:12)

1. Nachal'nik 98-go otdeleniya svyazi g.Moskvy (for Rodenkova).
 2. Leningradskiy pochtamt (for Rumyantseva).
 3. Arzamasakaya kontora svyazi Gor'kovskoy oblasti (for Kitayeva).
 4. Minerskoye otdeleniye perevozki pochty (for Klimova).
 5. 5-ye otdeleniye svyazi g.Chelyabinska (for Zhalilova).
 6. Nachal'nik 24-go otdeleniya svyazi g.Ivanova (for Kirillova).
 7. Kuybyshevskiy pochtamt (for Kharina).
 8. Otdel obrabotki pismennoy korrespondentsii Sverdlovskogo otdeleyniya perevozki pochty (for Tuzova).
- (Postal service--Employees)

1. The first of the two main points of the report is that the

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BYKOV, A.N.; YERMOLAYEVA, Ye.A.; KIRILLOVA, T.M.; LITS, N.P.

Colored polymers of caprolactam and aminoanthraquinones as
stabilizing agents in polymerization process. Khim.volok no.4:
9-10 '62. (MIRA 15:8)

1. Ivanovskiy khimiko-tekhnologicheskii institut.
(Asepinone) (Anthraquinone) (Polymerization)

BYKOV, A.N.; KIRILLOVA, T.M.; LITS, N.P.

Spectrophotometric investigation of colored polycaprolactams.

Vysokom.sbed. 5 no.3:428-431 Mr '63.

(MIRA 16:3)

1. Ivanovskiy khimiko-tehnologicheskii institut.
(Polyamides—Absorption spectra)

BYKOV, A.N.; YERMOLAYEVA, Ye.A.; KIRILLOVA, T.M.; GOLUBEVA, A.N.

Colored capron fibers. Khim. volok. no.2:41-43 '64.
(MIRA 17:5)

1. Ivanovskiy khimiko-tekhnologicheskoy institut.

PILIKOVSKIY, M. IA., KIRILLOVA, T.P.

Cotton Manufacture

Processing machine picked cotton Tekst. prom. no. 5, 1952.

Monthly List of Russian Accessions, Library of Congress, August 1952, UNCLASSIFIED.

KIRILLOVA, T.S.; SHILOVA, Ye.A.

Errors in measuring the periodic deviation of the pitch of a lead
screw. Izv.tekh. no.7:8-10 J1 '62. (MIRA 15:6)
(Screws--Testing)

1. KIRILLOVA, T. S.
2. USSR (600)
4. Stars, Variable
7. MQ Cygni.
Per. zvezdy 8 No. 3, 1951

9. Monthly Lists of Russian Accessions, Library of Congress, March 1953, Unclassified.

KIRILLOVA, T. S.

PARENAGO, P.P.; KIRILLOVA, T.S.

"Study of the velocities of stars in space." Abstract by T.S.
Kirillova. Vop.kosm. 3:313-316 '54. (MIRA 8:3)
(Stars)

KIRILLOVA, T. S.

USSR/ Astronomy

Card : 1/1

Authors : Kirillova, T. S.

Title : Stars, located closer than five parsecs

Periodical : Priroda^{us}, 6, 89 - 91, June 1954

Abstract : The article appears to be a translation from the USA Publications Astronomical Society Pacific v. 65, 1953, No. 383, p. 73-77. A diagram showing the disposition of close stars and a list of stars located closer than five parsecs are included. Table, drawing.

Institution : The M. V. Lomonosov State University, The P. K. Shternberg State Astronomical Institute, Moscow

Submitted :

KIRILLOVA, T.S.

KIRILLOVA, T.S.--"Investigations of Stars in Gaseous Nebulae."*(Dissertations For Degrees
In Science And Engineering Defended At USSR Higher Educational
Institutions) (34). Moscow State U imeni M.V. Lomonosov, State
Astronomical Inst imeni P.K. Shternberg, Moscow, 1955

SO: Knizhnaya Letopis' No. 34. 20 August 1955

* For the Degree of Candidate in Physicomathematical Sciences

KIRILOVA T.S.

P 5

PHASE I BOOK EXPLOITATION

SOV/3939

SOV/51-M-29

Moscow. Universitet. Gosudarstvennyy astronomicheskiy institut imeni
P.K. Shternberga

Trudy, tom 29 (Transactions of the State Astronomical Institute imeni
P.K. Shternberg, Moscow State University, Vol 29) [Moscow] 1958.
274 p. 500 copies printed.

Resp. Ed.: P.P. Parenago, Corresponding Member, Academy of Sciences
USSR; Ed.: Ye.D. Pavlovskaya; Tech. Ed.: M.S. Yermakov.

PURPOSE: The book is intended for astronomers and astrophysicists.

COVERAGE: This is a collection of three monographs on observations
of star luminosity in the neighborhood of the sun, stellar observa-
tion in the vicinity of S Monoceros, and the photometric study of
stars in the region of five large gaseous nebulae: IC 1805,
NG 2175, NGC 2237-38, NGC 6618, and IC 1396. Catalogues of stars
with additional data appear after each monograph. References
accompany each monograph.

Card 1/6

Transactions of the State (Cont.)

SOV/3939

TABLE OF CONTENTS:

Sharov, A.S. Color-Luminosity Diagram of Stars in the Neighborhood of the Sun

Introduction	3
Ch. I. Taking into Account Atmospheric Transparency in Making Electrophotometric Observations	5
Ch. II. Observations and Their Analysis	17
Ch. III. Accuracy of the Catalogue of Color Indicators	36
Ch. IV. Color-Luminosity Diagram	42
Bibliography	61
Catalogue	63
Card 2/6	

Transactions of the State (Cont.)

SOV/3939

Granova, T.A. Investigation of Stars in the Region of S Monoceros

Introduction	71
Ch. I. Obtaining Observational Data	77
Ch. II. Determination of Magnitudes and Color Indicators of Stars	82
Ch. III. Variable Stars	91
Ch. IV. Color and Visible Magnitude Diagram of Stars	104
Ch. V. Investigation of Star Motions in the Region of S Mon	127
Ch. VI. Some General Statistical Conclusions. Discussion of Age Characteristics and Possible Ways of Evolution of Star Clusters	134
Conclusion	140
Card 3/6	

Transactions of the State (Cont.)	SOV/3939	
Bibliography		143
Appendixes:		
Table I. Catalogue of Variable Stars in the Region of S Monoceros		145
Table II. Evaluation of Brightness of Variable Stars		148
Table III. Catalogue of Star Magnitudes in the Region of S Mon		157
Table IV. Nomenclature of Stars		173
Fig. 24. Chart of the Region S Mon	Insert	178
Fig. 25. Chart of Control Region B	Insert	178
Fig. 26. Charts of the Vicinity of Variable Stars in Control Section A	Insert	178
Card 4/6		

Transactions of the State (Cont.)

SOV/3939

Kucillova, T.S. Investigation of Stars in Gaseous Nebulae

Introduction	178
Ch. I. Methods for Determining the Magnitudes of Stars and the Indicators of Star Color in the Region of Gas-Dust Nebulae Under Consideration	183
Ch. II. Characteristic of Individual Regions Studied. Results of Counting the Stars	198
Ch. III. Method of Constructing the Color and Visible Magnitude Diagram of Stars in the Diffuse Clusters: IC 1805, NGC 2175, NGC 2244, NGC 6618, IC 1396	206
Ch. IV. Spectrum-- Luminosity Diagrams of the Diffuse Star Clusters	246
Conclusion	256
Card 5/6	

KIRILLOVA, T. S.; PAVLOVSKAYA, Ye. D.

Statistical analysis of measurement errors of radial velocities
of stars of late spectral classes. Astron. zhur. 40 no.1:
131-139 J-F '63. (MIRA 16:1)

1. Gosudarstvennyy astronomicheskiy institut im. P. K.
Shternberga.

(Stars—Motion in line of sight)

KIRILLOVA, T.S. (Moskva)

Perforation of ulcer of the duodenum into the retroperitoneal
space. Khirurgiia no.12:114-115 '61. (MIRA 15:11)
(PEPTIC ULCER) (RETROPERITONEAL SPACE)

KIRILLOVA, T.V.

KIRILLOVA, T.V.

Effect of irrigation on the radiation characteristics of the active
surface. Trudy GGO no.37:7-12 '52. (MIRA 11:1)
(Leningrad Province--Irrigation)
(Solar radiation)

KIRILLOVA, T.V.

~~Relationship between counter-radiation and the degree of cloudiness.~~
Trudy GGO no.37:68-70 '52. (MIRA 11:1)
(Solar radiation) (Clouds)

KIRILLOVA, T. V.; LAYKHTMAN, D.L.; OONEVA, T. A.; TIMOFEYEV, M.P.; TSEYTN, G. KH.;
AYZENSHTAT, B. A.

"Measurement of the Heat Balance of the Active Surface for the Case of
Irrigation"

Tr. Gl. Geofiz. Observatori, No 39, 37-60, 1953

The authors present data on the components of the heat and radiative balance of the active surface in a semidesert and in an irrigated field. The data was obtained by an expedition of the Main Geophysical Observatory in July 1952 in the sovkhos "Pakhta-Aral," a collective farm in Central Asia. It was found that heat exchange in soil practically does not change under the influence of irrigation. (RZhGeol, No 3, 1954)

SO; W-31187, 8 Mar 55

KIRILLOVA, T. V., BORUSHKO, I. S., OGNEVA, T. A. and CHURINOVA, M. P.

"Description of Observation Procedures and Areas".
Trudy Gl. Geofiz. Observ., No 39, pp 290-298, 1953.

Information on the observations made by the expedition of the Main Geophysical Observatory to Pakhta-Ara and to Golodnaya Step' in the month of July of 1952 is given. (RZhGeol, No 11, 1955)

SO: Sum No 884, 9 Apr 1956

Kirillova, T. V.

AYZENSHTAT, B. A., and KIRILLOVA, T. V.

"Comparative Characteristics of the Components of the Radiation Balance of a Semidesert and a Cotton Field."
Dokl. AN Uzbek SSR, No 2, pp 37-41, 1954

The expedition to Golodnaya Steppe (1952) studied the peculiarities of the radiation balance and its components for particular days in irrigated cotton fields and a semidesert. At noontime the radiation balance of a cotton field reaches $0.9-1.0 \text{ cal/cm}^2/\text{min}$, exceeding the balance of a semidesert by about $0.2 \text{ cal/cm}^2/\text{min}$. The authors draw the conclusion that irrigation and cultivation are factors which influence the microclimate. (RZhGeol, No 2, 1955)

SO: Sum, No 606, 5 Aug 55

KIRILLOVA, T.V.

Subject : USSR/Meteorology and Hydrology AID P - 1865
Card 1/1 Pub. 71-a - 8/26
Author : Kirillova, T. V.
Title : ~~Heat conditions of a wheat field~~
Periodical : Met. 1 gidro., no.2, 30-32, 1955
Abstract : The article describes experiments with watered and
unwatered wheat fields in the Northern Crimea in
1953. One table and 1 diagram are given. One
Russian reference, 1953.
Institution : None
Submitted : No date

KIRILLOVA, T.V.; NESINA, L.V.

Effect of irrigation on the change of heat balance components in a
wheat field. Trudy GGO no.53:66-79 '55. (MLRA 9:8)
(Atmospheric temperature) (Irrigation)

KIRILLOVA, T.V.

Measurement and calculation of effective radiation. Trudy GGO no.53:
92-94 '55.

(MLRA 9:8)

(Solar radiation)

KIRILLOVA, T.V.

Methods for calculating radiation balance. Trudy GGO no.59:9-15 '56.
(MIRA 10:3)

(Solar radiation)

KIRILLOVA, T. V.

3(7)

p 2 + 4

PHASE I BOOK EXPLOITATION

SOV/1734

Leningrad. Glavnaya geofizicheskaya observatoriya

Issledovaniye protsessov teplo- i vlagoobmena nad vodoyemami (Research in the Processes of Heat and Moisture Exchange Over Water Reservoirs) Leningrad, Gidrometeditdat, 1958. 130 p. (Series: Its: Trudy, vyp. 78) 1,375 copies printed.

Sponsoring Agency: USSR. Glavnoye upravleniye gidrometeorologicheskoy sluzhby

Ed. (title page): M.F. Timofeyev, Candidate of Physical and Mathematical Sciences; Ed. (inside book): Yu.V. Vlasova; Tech. Ed.: N.V. Volkov.

PURPOSE: This publication is intended for scientific and technical personnel working in meteorology, hydrology, hydrotechnology and related fields.

COVERAGE: This collection of articles, by several authors, reports the results of experimental work carried on in 1956 in investigating the meteorological conditions over water reservoirs. It contains the results and an examination of

Card 1/4

Research in the Processes (Cont.)

SOV/1734

the meteorological and aerological investigation conducted at Lake Sevan under field conditions during the summer of 1956. Two articles are devoted to meteorological conditions prevailing over Lake Balkhash. No personalities are mentioned. The articles are accompanied by tables, diagrams, and bibliographic references.

TABLE OF CONTENTS:

Timofeyev, M.P., and T.A. Ogneva Relationship Between Evaporation and a Deficiency in Air Humidity	3
Drozdoz, O.A. Moisture Cycle in a Mountainous Depression	10
Ogneva, T.A. Computing Evaporation From the Surface of Lake Sevan	16
Kirillova, T.V. Radiation Balance of Lake Sevan	25
<u>Kirillova, T.V., and R.F. Byuring. Results of Subaqueous Radiation Measurements</u>	34
Vorontsov, P.A. Characteristics of the Wind and Thermal Regimen Over Lake Sevan	41

Card 2/4

Research in the Processes (Cont.)

SOV/1734

Chestnaya, I.I. Air Currents Over Lake Sevan	65
Selezneva, Ye.S. The Origin of Northern Summer Winds in the Lake Sevan Basin	77
Matveyev, L.T. Airborne Studies of the Structure of Turbulent Air Currents in the Regime of Lake Sevan	84
Matveyev, L.T. Structural Function of the Vertical Velocity of the Air Current and a New Method of Computing the Coefficient of Turbulence in the Free Atmosphere	98
Vorontsov, P.A. Vertical Movements of Air Over Lake Sevan	108
Ogneva, T.A. Trial Computation of Surface Water Evaporation and the Heat-Air Exchange Over Lake Balkhash	120

Card 3/4

Research in Processes (Cont.)

SOV/1734

Kirillova, T.V. Radiation Balance of Lake Balkhash

125

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Card 4/4

BELIKOV, P.S., doktor biol. nauk, prof.; KIRILLOVA, T.V., laborant.

Intensity of excretion as a factor in determining the functional
state of plant cells [with summary in English]. Izv. TSChA no.2:
21-38 '58. (MIRA 11:6)

(Botany--Physiology) (Cells)

3(4,7)

PHASE I BOOK EXPLOITATION

SOV/2440

Vsesoyuznyy gidrologicheskiy s"yezd, 3rd, Leningrad, 1957.

Trudy...t. III: Sektsiya gidrofiziki (Transactions of the 3rd All-Union Hydrological Convention. v. 3: Hydrophysics Section) Leningrad, Gidrometeoizdat, 1959. 470 p. Errata slip inserted. 2,000 copies printed.

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Resp. Ed.: V.A. Uryvayev; Ed.: V.S. Protopopov; Tech. Ed.: M.I. Braynina.

PURPOSE: This work is intended for meteorologists, hydrologists, and hydrophysicists, particularly those engaged in the study of snow and ice and evaporation processes.

COVERAGE: This book contains papers on hydrophysics which were presented and discussed at the Third All-Union Hydrological Conference in Leningrad, October 1957. The Conference published 10 volumes

Card 1/14

Transactions of the 3rd All-Union (Cont.)

SOV/2440

on various aspects of hydrology of which this is number 3. The editorial board in charge of the series include: V.A. Uryvayev (Chairman), O.A. Alekin, Ye.V. Bliznyak (deceased), O.N. Borsuk, M.A. Velikanov, L.K. Davydov, A.P. Domanitskiy, G.P. Kalinin, S.N. Kritskiy, B.I. Kudelin, L.F. Manoim, M.F. Menkel', B.P. Orlov, I. V. Popov, A.K. Proskuryakov, D.L. Sokolovskiy, O.A. Spengler, A.I. Chebotarev, and S.K. Cherkavskiy. This volume is divided into 2 sections: the first contains reports from the subsection for the study of evaporation processes, and the second contains reports from the snow and ice subsection. References accompany each article.

TABLE OF CONTENTS:

Foreword	3
List of Abbreviations for Institutions	5
PART I. SUBSECTION OF EVAPORATION STUDY	
Reports	9
Card 2/ 14	

Transactions of the 3rd All-Union (C. S.)

SOV/2440

Vikulina, Z.A. [Candidate of Geographical Sciences, GGI Leningrad]
Computing Evaporation From the Surface of Water Reservoirs 9

Timofeyev, M.P. [Candidate of Physical and Mathematical Sciences,
GGI Leningrad] Application of the Heat Balance Method to Deter-
mine the Evaporation From the Surface of Water Bodies 16

Krasovskiy, A.A. [Director of the Group, Lengidep Leningrad] Ap-
plication of GGI and GGO Methods to Determine Evaporation From the
Water Surface of Reservoirs and the Transpiration of Hydrophytes 26

Laykhtman, D.L. [Professor, Doctor of Physical and Mathematical
Sciences, GGO Leningrad] The Diurnal and Yearly Rate of Evapora-
tion From Small Bodies of Water 35

Krillova, T.V. [Candidate of Physical and Mathematical Sciences,
GGO Leningrad] Radiation Balance of Water Bodies 42

Vorontsov, P.A. [Candidate of Geographical Sciences, GGO Lenin-
grad] Certain Characteristics of Meteorological Conditions Over

Card 3/ 14

Transactions of the 3rd All-Union (Cont.)	SOV/2440	
Water Bodies		50
Yakovleva, N.I. [Junior Scientific Worker, GGO Leningrad] The Effect of Water Surfaces on the Air Transformation		59
Dmitriyeva, N.G. [Candidate of Geographical Sciences, TsGPP Moscow] Infiltration Into Deep Beds in Relation to the Determination of Evaporation		64
Konstantinov, A.P., and V.F. Pushkarev [Candidates of Physical and Mathematic Sciences, GGO Leningrad] Basic Trends in the Study of Evaporation From a Ground Surface		72
Volobuyev, V.R. [Corresponding Member of the Azerbaydzhan Academy of Sciences, Doctor of Agricultural Sciences] Relation Between Soils and the Hydrological Conditions		84
Romanov, V.V. [Candidate of Technical Sciences, GGO Leningrad] Determining Evaporation by the Heat Balance Method Using the Data of Standard Meteorological Observations		92
Rusin, N.P. [Candidate of Geographical Sciences, GGO Leningrad] The Gradient Method for Determining Evaporation From the Ground		

Card 4/ 14

Transactions of the 3rd All-Union (Cont.)	SOV/2440	
and Its Application Within the Station Network		95
Konstantinov, A.R. [Candidate of Physical and Mathematical Sciences, VNIIGL GGI Valday] Computing Evaporation From the Ground According to Data Supplied by Meteorological Stations		103
Struzer, L.R. [Candidate of Physical and Mathematical Sciences, GGI Leningrad] Estimating the Error in the Existing Methods for Determining Evaporation From the Ground		110
Biryukov, N.S. [Candidate of Geological and Mineralogical Sciences, Institute of Forestry, Uspenskoye] Computing Total Evaporation of the Taiga Zone as Exemplified by the Forest Range of the Kadnokovskoye Forest District in the Vologodskaya Oblast'		119
Budagovskiy, A.I. [Candidate of Technical Sciences, Institute of Geography, Moscow] Evaporation From the Surface of a Vegetation Cover		125
Fedorov, S.F. [Candidate of Technical Sciences, VNIIGL Valday]		
Card 5/14		

Transactions of the 3rd All-Union (Cont.)	SOV/2440
Evaporation Under Forest Conditions	131
Kuznetsov, V.I. [Candidate of Technical Sciences, GGI Leningrad] Evaporation From Bodies of Water Affected by Plant Growth	140
Shebeko, V.F. [Candidate of Technical Sciences, Belorussian MII for Soil Improvement and Water Economy] The Effect of Draining a Swamp on the Evaporation Regimen	148
Pushkarev, V.F. [Candidate of Physical and Mathematical Sciences, GGI Leningrad] Studying the Elements of Water Balance in Soils by Means of Hydraulic evaporators	156
Kozlov, M.P. [Candidate of Geographical Sciences, VNIOL Valday] The Daily Rate of Summary Evaporation From a Meado and its Relation to the Daily Rate of Meteorological Elements	166
Minutes of the Meetings of the Evaporation Subsection of the Hydrophysics Section	174
Decisions of the Evaporation Subsection of the Hydrophysics Section	202
PART II. SUBSECTION FOR THE STUDY OF SNOW AND ICE	
Reports	209
Card 6/ 14	

Transactions of the 3rd All-Union (Cont.)	SOV/2440	
Rikhter, G.D. [Professor, Doctor of Geographical Sciences, Institute of Geography, Moscow] Geography of the Snow Cover in the USSR		209
Shcherbakova, Ye.Ya. [Candidate of Geographical Sciences, GGO Leningrad] Study of the Snow-cover Regimen in the USSR		215
Kuz'min, P.P. [Candidate of Geographical Sciences, GGI Leningrad] Methods and Results of Computating the Intensity (Rate) of Snow Melting in European USSR		220
Kuz'min, P.P. Study of the Snow Melting Process Under the Conditions of Intersected and Wooded Area		222
Spengler, O.A. [Candidate of Geographical Sciences, GGI Leningrad] Certain Characteristics of the Snow Cover Distribution in Northern Kazakhstan		231
Grishin, I.S. [Junior Scientific Worker] Special Features in the Distribution of the Snow Cover in Don River Basin		234
Card 7/14		

Transactions of the 3rd All-Union (Cont.)	SOV/2440	
Ivanov, I.V. (deceased) [Candidate of Geographical Sciences, TsIP Moscow] Basic Features of Snow Cover in European USSR (According to the Data of the Snow Survey)		241
Plakida, M.E. [Docent, Candidate of Technical Sciences] Problems Arising in the Study of the Ice Regime of Water Reservoirs in Relation to the Construction of Hydraulic Engineering Harbor Installations		243
Bydin, F.I. [Doctor of Technical Sciences, Laboratory of Limnology, Leningrad] Development of Certain Problems in the Fields of Ice Conditions in Bodies of Water		246
Bulatov, S.N. [Junior Scientific Worker, TsIP Moscow] The Effect of Water Conditions in Winter on the Ice Regimen and the Ice Break-up of Rivers		253
Shulyakovskiy, L.G. [Candidate of Technical Sciences, TsIP Moscow] Computing the Appearance of Ice on Rivers With Natural Flow Conditions and on Rivers With Regulated Discharge		258
Shulyakovskiy, L.G. Computing the Onset of River Freeze-up Without Observation Data for Past Years		266
Card 8/ 14		

Transactions of the 3rd All-Union (Cont.)

SOV/2440

Kolesnikov, A.G. [Professor, Doctor of Physical and Mathematical Sciences] and A.A. Pivovarov [Candidate of Physical and Mathematical Sciences] Computing the Rate of Autumnal Cooling Along a River 270

Braslavskiy, A.P. [Candidate of Technical Sciences, GGI Leningrad] Computing the Ice Regimen of the Northern Kazakhstan Lakes 278

Panov, BP. [Docent, Candidate of Geographical Sciences, LGMI Leningrad] Long-range Changes in the Ice Break-up and Freeze-up Times of Rivers and Lakes and the Question of Extra Long-range Forecasting 287

Ginzburg, B.M. [Candidate of Technical Sciences, TsIP Moscow] Fundamentals of the Method of Long-range Forecasting of Ice Break-up on Rivers 296

Makarevich, T.N. [Candidate of Geographical Sciences, GGI Leningrad] Unstable Ice Regimens on Rivers and Methods for Forecasting 302

Card 9/14

Transactions of the 3rd All-Union (Cont.)	SOV/2440	
Savchenkova, Ye.I. [Candidate of Geographical Sciences, TsIP Moscow] Long-range Forecasts of the Time of Ice Appearance on Siberian and Far Eastern Rivers		309
Pronin, A.G. [Candidate of Geographical Science, LGU Leningrad] Atlantic Ocean Effect on the Types of Ice Cover and the Time of Ice Break-up for the Northwestern RSFSR Rivers		313
Piotrovich, V.V. [Candidate of Technical Sciences], and N.F. Vinogradova [Candidate of Geographical Sciences] Basic Means for Developing a Method of Long-range Forecast of Freeze-up and Ice Clearance Times in Reservoir Projects		320
Kononov, I.M. [Professor, Doctor of Technical Sciences] V.V. Balanin [Docent, Candidate of Technical Sciences], and R.I. Shcherbakova [Engineer, LIIVT] Basic Problems in the Development of Ice Engineering		326
Myasnikov, M.V. [Chief Engineer, Omsk] An Attempt to Use Solar Radiation for the Needs of Water Transportation		333
Groman, D.C. [Engineer, Teploelektroproyekt, Rostov] Regulating		
Card 10/14		

Transactions of the 3rd All-Union (Cont.)

SOV/2440

the River Discharge by Ice Reservoirs 341

Sokol'nikov, N.M. [Engineer, Lengidep] Problems of the Ice and Thermal Regimen of Rivers and Reservoirs in Water Power Projects 348

Lylo, V.M. [Candidate of Geographical Sciences] Variations in the Glacial-Thermal Regimen of the Angara River During the Filling of the Irkutsk Water Reservoir at a Time of Intensive Sludge Formation 353

Gotlib, Ya. L., Ye.Ye. Zaymin, and N.I. Smolin [Engineers] Studying the Winter Regimen of the Angara River While Planning Hydroelectric Power Stations 359

Aleksandrovskiy, Yu.V. [Docent, Candidate of Technical Sciences], and A.K. Klimenko [Engineer] Planning the Winter Level Regimen of the Tail-water of Hydroelectric Power Stations 369

Svetitskiy, V.P. [Engineer, SAOGidep, Tashkent] Winter Regimen of the Hydroelectric Power Station of the Chirchik-Bozsuyskiy

Card 11/14